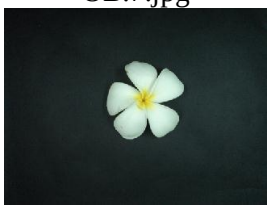
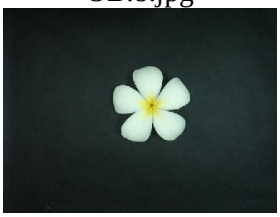
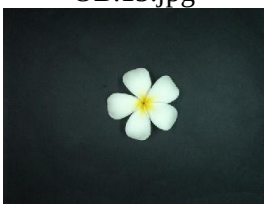
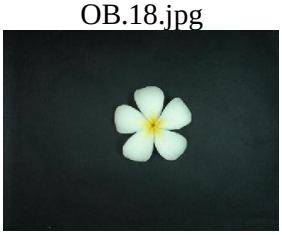
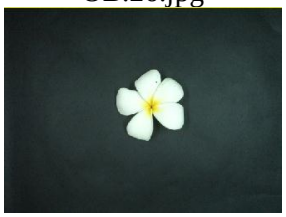
LAMPIRAN 1

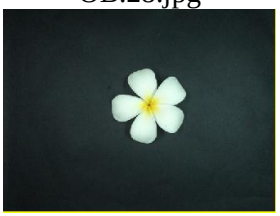
DATA YANG DIGUNAKAN UNTUK PENELITIAN

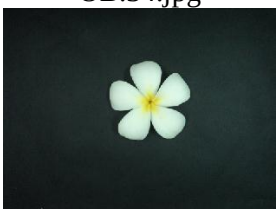
No	Nama Citra	Ekstraksi Ciri	Nilai Mean R	Nilai Mean Y
1	OB.1.jpg 	Ekstraksi warna Perimeter Area compactness	0.2690 515 16623 1.2697 TS	0.2112 515 16623 1.2697 TS
2	OB.2.jpg 	Ekstraksi warna Perimeter Area compactness	0.2703 519 15496 1.3833 S	0.2172 519 15496 1.3833 S
3	OB.3.jpg 	Ekstraksi warna Perimeter Area compactness	0.2705 535 15964 1.4268 S	0.2150 535 15964 1.4268 S
4	OB.4.jpg 	Ekstraksi warna Perimeter Area compactness	0.2708 551 16077 1.5028 S	0.2041 551 16077 1.5028 S
5	OB.5.jpg 	Ekstraksi warna Perimeter Area compactness	0.2727 - - - TS	0.2132 541 16269 1.4316 S
6	OB.6.jpg 	Ekstraksi warna Perimeter Area compactness	0.2699 519 15293 1.4016 S	0.2192 519 15293 1.4016 S

7	OB.7.jpg 	Ekstraksi warna Perimeter Area compactness	0.2712 518 16761 1.2739 TS	0.2134 518 16761 1.2739 TS
8	OB.8.jpg 	Ekstraksi warna Perimeter Area compactness	0.2703 519 15500 1.3829 S	0.2174 519 15500 1.3829 S
9	OB.9.jpg 	Ekstraksi warna Perimeter Area compactness	0.2782 - - - TS	0.2527 - - - TS
10	OB.10.jpg 	Ekstraksi warna Perimeter Area compactness	0.2702 546 17593 1.3485 S	0.2527 546 17593 1.3485 S
11	OB.11.jpg 	Ekstraksi warna Perimeter Area compactness	0.2766 - - - TS	0.2565 - - - TS
12	OB.12.jpg 	Ekstraksi warna Perimeter Area compactness	0.2834 - - - TS	0.2172 533 16002 1.4128 S
13	OB.13.jpg 	Ekstraksi warna Perimeter Area compactness	0.2724 - - - TS	0.1978 604 22482 1.2913 S

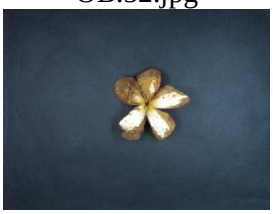
14	OB.14.jpg 	Ekstraksi warna Perimeter Area compactness	0.2736 - - - TS	0.1961 612 22207 1.3422 TS
15	OB.15.jpg 	Ekstraksi warna Perimeter Area compactness	0.2693 494 14198 1.3678 S	0.2305 494 14198 1.3678 S
16	OB.16.jpg 	Ekstraksi warna Perimeter Area compactness	0.2701 515 15496 1.3620 S	0.2170 515 15496 1.3620 S
17	OB.17.jpg 	Ekstraksi warna Perimeter Area compactness	0.2782 - - - TS	0.2505 - - - TS
18	OB.18.jpg 	Ekstraksi warna Perimeter Area compactness	0.2708 516 15498 1.3671 S	0.2177 516 15498 1.3671 S
19	OB.19.jpg 	Ekstraksi warna Perimeter Area compactness	0.2720 - - - TS	0.1988 539 17997 1.2846 S
20	OB.20.jpg 	Ekstraksi warna Perimeter Area compactness	0.2702 531 14503 1.5471 S	0.2225 531 14503 1.5471 S

21	OB.21.jpg 	Ekstraksi warna Perimeter Area compactness	0.2704 542 17969 1.3010 S	0.1999 542 17969 1.3010 S
22	OB.22.jpg 	Ekstraksi warna Perimeter Area compactness	0.2724 - - - TS	0.2097 503 16594 1.2133 TS
23	OB.23.jpg 	Ekstraksi warna Perimeter Area compactness	0.2720 - - - TS	0.1997 540 18022 1.2876 S
24	OB.24.jpg 	Ekstraksi warna Perimeter Area compactness	0.2771 - - - TS	0.2513 - - - TS
25	OB.25.jpg 	Ekstraksi warna Perimeter Area compactness	0.2702 544 17601 1.3380 S	0.2081 544 17601 1.3380 S
26	OB.26.jpg 	Ekstraksi warna Perimeter Area compactness	0.2766 - - - TS	0.2505 - - - TS

27	OB.27.jpg 	Ekstraksi warna Perimeter Area compactness S	0.2702 544 17601 1.3380	0.2081 544 17601 1.3380 S
28	OB.28.jpg 	Ekstraksi warna Perimeter Area compactness S	0.2698 492 14164 1.3600	0.2309 492 14164 1.3600 S
29	OB.29.jpg 	Ekstraksi warna Perimeter Area compactness S	0.2703 516 15267 1.3878	0.2208 516 15267 1.3878 S
30	OB.30.jpg 	Ekstraksi warna Perimeter Area compactness S	0.2698 492 14167 1.3597	0.2310 492 14167 1.3597 S
31	OB.31.jpg 	Ekstraksi warna Perimeter Area compactness S	0.2695 518 15481 1.3793	0.2170 518 15481 1.3793 S
32	OB.32.jpg 	Ekstraksi warna Perimeter Area compactness S	0.2699 519 15293 1.4016	0.2192 519 15293 1.4016 S
33	OB.33.jpg 	Ekstraksi warna Perimeter Area compactness S	0.2704 542 17969 1.3010	0.1999 542 17969 1.3010 S

34	OB.34.jpg 	Ekstraksi warna Perimeter Area compactness	0.2703 519 15500 1.3829 S	0.3124 519 15500 1.3829 S
35	OB.35.jpg 	Ekstraksi warna Perimeter Area compactness	0.2702 518 15505 1.3771 S	0.2175 518 15505 1.3771 S
36	OB.36.jpg 	Ekstraksi warna Perimeter Area compactness	0.2714 605 22486 1.2954 S	0.1978 605 22486 1.2954 S
37	OB.37.jpg 	Ekstraksi warna Perimeter Area compactness	0.2698 494 14166 14166 S	0.2310 494 14166 14166 S
38	OB.38.jpg 	Ekstraksi warna Perimeter Area compactness	0.2704 542 17972 1.3007 S	0.2000 542 17972 1.3007 S
39	OB.39.jpg 	Ekstraksi warna Perimeter Area compactness	0.2698 518 16652 1.2823 S	0.2126 518 16652 1.2823 S
40	OB.40.jpg 	Ekstraksi warna Perimeter Area compactness	0.2693 494 14198 1.3678 S	0.2305 494 14198 1.3678 S

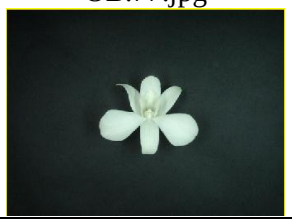
41	OB.41.jpg 	Ekstraksi warna Perimeter Area compactness	0.2694 555 17796 1.3774 S	0.2102 555 17796 1.3774 S
42	OB.42.jpg 	Ekstraksi warna Perimeter Area compactness	0.2721 - - - TS	0.2170 519 15496 1.3833 S
43	OB.43.jpg 	Ekstraksi warna Perimeter Area compactness	0.2737 - - - TS	0.2092 552 17745 1.3664 S
44	OB.44.jpg 	Ekstraksi warna Perimeter Area compactness	0.2694 555 17796 1.3774 S	0.2102 555 17796 1.3774 S
45	OB.45.jpg 	Ekstraksi warna Perimeter Area compactness	0.2698 518 16652 1.2823 S	0.2126 518 16652 1.2823 S
46	OB.46.jpg 	Ekstraksi warna Perimeter Area compactness	0.2725 - - - TS	0.2074 551 17647 1.3691 S
47	OB.47.jpg 	Ekstraksi warna Perimeter Area compactness	0.2708 495 14193 1.3738 S	0.2308 495 14193 1.3738 S

48	OB.48.jpg 	Ekstraksi warna Perimeter Area compactness	0.2693 494 14198 1.3678 S	0.2305 494 14198 1.3678 S
49	OB.49.jpg 	Ekstraksi warna Perimeter Area compactness	0.2701 515 15496 1.3620 S	0.2170 515 15496 1.3620 S
50	OB.50.jpg 	Ekstraksi warna Perimeter Area compactness	0.2720 - - - TS	0.1997 540 18022 1.2876 S
51	OB.51.jpg 	Ekstraksi warna Perimeter Area compactness	0.2978 - - - S	0.2678 - - - S
52	OB.52.jpg 	Ekstraksi warna Perimeter Area compactness	0.2673 - - - TS	0.2885 - - - S
53	OB.53.jpg 	Ekstraksi warna Perimeter Area compactness	0.2870 - - - S	0.3883 - - - S
54	OB.54.jpg 	Ekstraksi warna Perimeter Area compactness	0.2911 - - - S	0.3043 - - - S

55	OB.55.jpg 	Ekstraksi warna Perimeter Area compactness	0.2751 - - - TS	0.2937 - - - S
56	OB.56.jpg 	Ekstraksi warna Perimeter Area compactness	0.2792 - - - S	0.2541 - - - S
57	OB.57.jpg 	Ekstraksi warna Perimeter Area compactness	0.2972 - - - S	0.2685 - - - S
58	OB.58.jpg 	Ekstraksi warna Perimeter Area compactness	0.2866- - - S	0.4379 - - - S
59	OB.59.jpg 	Ekstraksi warna Perimeter Area compactness	0.2970 - - - S	0.2571 - - - S
60	OB.60.jpg 	Ekstraksi warna Perimeter Area compactness	0.2776 - - - S	0.2461 - - - S
61	OB.61.jpg 	Ekstraksi warna Perimeter Area compactness	0.2903 - - - S	0.2531 - - - S

62	OB.62.jpg 	Ekstraksi warna Perimeter Area compactness	0.2770 - - - TS	0.2343 - - - S
63	OB.63.jpg 	Ekstraksi warna Perimeter Area compactness	0.2782 - - - S	0.2501 - - - S
64	OB.64.jpg 	Ekstraksi warna Perimeter Area compactness	0.2901 - - - S	0.2918 - - - S
65	OB.65.jpg 	Ekstraksi warna Perimeter Area compactness	0.2769 - - - TS	0.2970 - - - S
66	OB.66.jpg 	Ekstraksi warna Perimeter Area compactness	0.2890 - - - S	0.2907 - - - S
67	OB.67.jpg 	Ekstraksi warna Perimeter Area compactness	0.2942 - - - S	0.2889 - - - S
68	OB.68.jpg 	Ekstraksi warna Perimeter Area compactness	0.2930 - - - S	0.2958 - - - S

69	OB.69.jpg 	Ekstraksi warna Perimeter Area compactness	0.2678 - - - TS	0.2883 - - - S
70	OB.70.jpg 	Ekstraksi warna Perimeter Area compactness	0.2755 - - - TS	0.2350 - - - S
71	OB.71.jpg 	Ekstraksi warna Perimeter Area compactness	0.2782 - - - S	0.2511 - - - S
72	OB.72.jpg 	Ekstraksi warna Perimeter Area compactness	0.2789 - - - TS	0.2528 - - - S
73	OB.73.jpg 	Ekstraksi warna Perimeter Area compactness	0.2962 - - - S	0.2539 - - - S
74	OB.74.jpg 	Ekstraksi warna Perimeter Area compactness	0.2954 - - - S	0.2550 - - - S
75	OB.75.jpg 	Ekstraksi warna Perimeter Area compactness	0.2957 - - - S	0.2499 - - - S

76	OB.76.jpg 	Ekstraksi warna Perimeter Area compactness	0.2818 - - - TS	0.2333 771 23927 1.9770 S
77	OB.77.jpg 	Ekstraksi warna Perimeter Area compactness	0.2747 - - - TS	0.2213 667 16697 2.1203 S
78	OB.78.jpg 	Ekstraksi warna Perimeter Area compactness	0.2721 - - - TS	0.2308 702 25218 1.5551 S
79	OB.79.jpg 	Ekstraksi warna Perimeter Area compactness	0.2723 - - - TS	0.2016 726 26883 1.5602 S
80	OB.80.jpg 	Ekstraksi warna Perimeter Area compactness	0.2775 - - - TS	0.2315 546 16699 1.4206 TS

KETERANGAN:

S **:** Sesuai

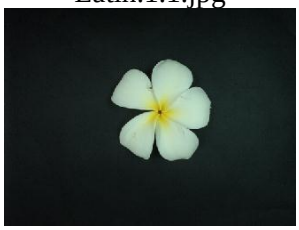
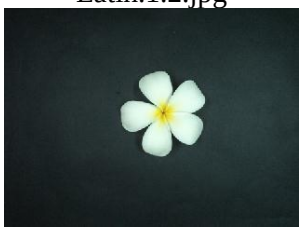
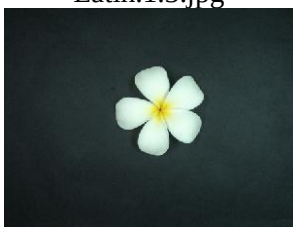
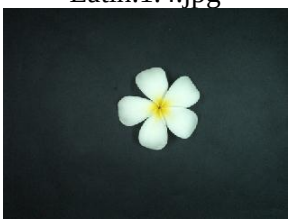
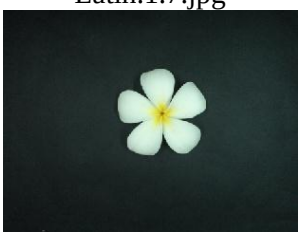
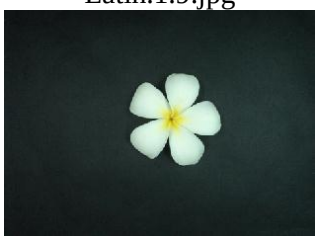
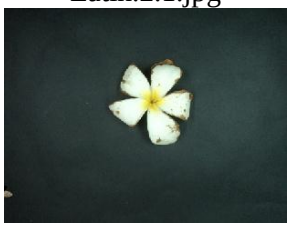
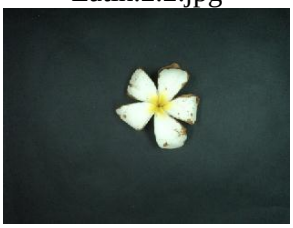
TS : Tidak Sesuai

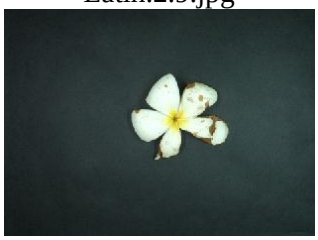
PERBANDINGAN HASIL PENGUJIAN

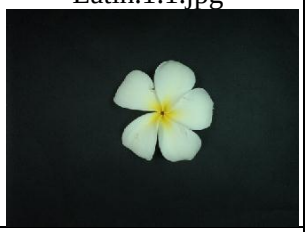
NO	Kanal warna	JUMLAH	
		Sesuai (S)	Tidak Sesuai(TS)
1	MEAN R	50	30
2	MEAN Y	70	10

LAMPIRAN 2

DATA YANG DIGUNAKAN UNTUK DATABASE

Latih.1.1.jpg	Latih.1.2.jpg	Latih.1.3.jpg
		
Nilai Warna: 0.1993	Nilai Warna: 0.2312	Nilai Warna: 0.2308
Latih.1.4.jpg	Latih.1.5.jpg	Latih.1.6.jpg
		
Nilai Warna: 0.2312	Nilai Warna: 0.2305	Nilai Warna: 0.1988
Latih.1.7.jpg	Latih.1.8.jpg	Latih.1.9.jpg
		
Nilai Warna: 0.2177	Nilai Warna: 0.2170	Nilai Warna: 0.2197
Latih.1.10.jpg	Latih.2.1.jpg	Latih.2.2.jpg
		
Nilai Warna: 0.2172	Nilai Warna: 0.2493	Nilai Warna: 0.2489
Latih.2.3.jpg	Latih.2.4.jpg	Latih.2.5.jpg
		
Nilai Warna: 0.2963	Nilai Warna: 0.2461	Nilai Warna: 0.2486

Latih.2.6.jpg  Nilai Warna: 0.2509	Latih.2.7.jpg  Nilai Warna: 0.2690	Latih.2.8.jpg  Nilai Warna: 0.2692
Latih.2.9.jpg  Nilai Warna: 0.2525	Latih.2.10.jpg  Nilai Warna: 0.2340	

1	Latih.1.1.jpg 	Perimeter Area compactness	608 22552 1.3044
2	Latih.1.2.jpg 	Perimeter Area compactness	491 14188 1.3522
3	Latih.1.6.jpg 	Perimeter Area compactness	539 17997 1.2846

1	Latih bk 1.jpg 	Perimeter Area compactness	625 21369 1.4547
2	Latih bk 2. jpg 	Perimeter Area compactness	727 26968 1.5596
3	Latih bk 3.jpg 	Perimeter Area compactness	669 16714 2.1309

LAMPIRAN 3

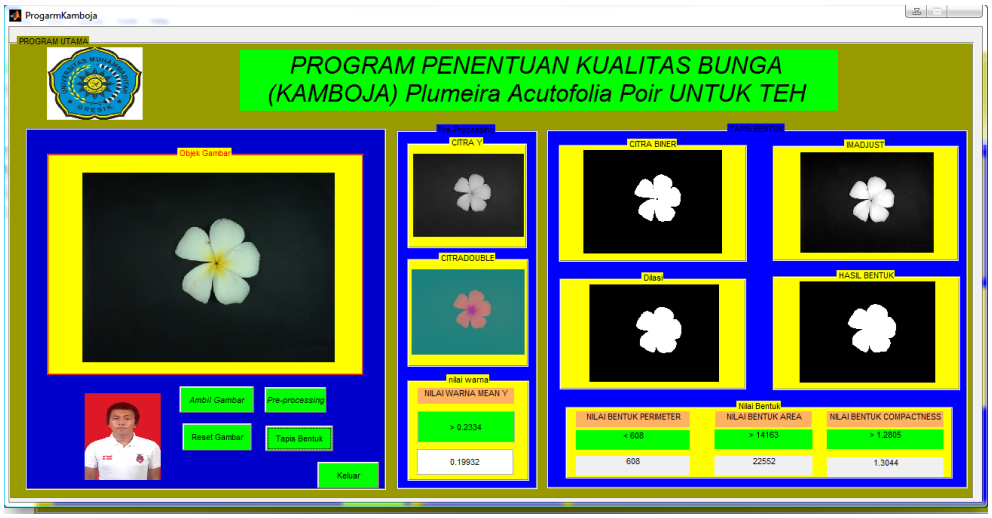
SOURCE CODE UNTUK *FUNCTION* BENTUK

BENTUK1.m

```
function Bentuk1(Citra)
    A1 = strel('disk',1);
    B = imerode(Citra,A1);
    C = (Citra-B);
    D = sum(C);
    E = sum(D);
    perimeter = (E)

    %Mencari Area
    F = sum(Citra);
    G = sum(F);
    area = (G)

    %Mencari Indeks Kebulatan
    compactness = perimeter^2/(4*pi*area)

    p = perimeter;
    a = area;
    c = compactness;
if c <= 1.3522
    if a >= 14163
        if p <= 608
            msgbox('bunga kamboja kualitas bagus @cocok untuk
dijadikan teh herbal','informasi')
        else
            msgbox('bunga kamboja bukan untuk teh @tidak cocok
untuk dijadikan teh herbal','informasi')
        end
    end
else
    msgbox('bunga kamboja bukan untuk teh @tidak cocok untuk
dijadikan teh herbal','informasi')
end
```

LAMPIRAN 4

SOURCE CODE PROGRAM UTAMA




```
% --- Executes on button press in AmbilGambar.
function AmbilGambar_Callback(hObject, eventdata, handles)
% hObject    handle to AmbilGambar (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
skripsi=guidata(gcbo);
[namafile,direktori]=uigetfile('*.jpg','Load Gambar');

a1 = imread(namafile);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.Object);
set(imshow(a1));
set(skripsi.Object,'Userdata',a1);


% --- Executes on button press in pre-proccesing.
function generate_Callback(hObject, eventdata, handles)
% hObject    handle to generate (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
skripsi=guidata(gcbo);
a1=get(skripsi.Object,'Userdata');
a3 = rgb2ycbcr(a1);
a4 = im2double(a3);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.CitraDouble);
set(imshow(a4));
set(skripsi.CitraDouble,'Userdata',a4);
%Pemisahan Warna YCbCr
Y = a4(:,:,1);
Cb = a4(:,:,2);
Cr = a4(:,:,3);
    set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.citraY);
    set(imshow(Y));
    set(skripsi.citraY,'Userdata',Y);
%nilai Mean
```

```
meanY = mean2(Y);

if meanY > 0.2334
    fprintf(' \n\tNilai Warna =%13.4f\n',meanY);
    msgbox('Kamboja Kualitas Buruk @tidak cocok untuk dijadikan
teh herbal','informasi')
    set(handles.TapisBentuk,'Enable','off')
end

% ------------------------------------------------------------------
----
function uipanel1_ButtonDownFcn(hObject, eventdata, handles)
% hObject    handle to uipanel1 (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)


% --- Executes during object creation, after setting all
properties.
function Object_CreateFcn(hObject, eventdata, handles)
% hObject    handle to Object (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    empty - handles not created until after all
CreateFcns called

% Hint: place code in OpeningFcn to populate Object


% --- Executes on button press in pushbutton5.
function pushbutton5_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton5 (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
skripsi=guidata(gcbo);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.Object);
cla;

skripsi=guidata(gcbo);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.CitraDouble);
cla;

skripsi=guidata(gcbo);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.BENTUK);
cla;

skripsi=guidata(gcbo);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.citraY);
cla;

skripsi=guidata(gcbo);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.Imadjust);
cla;
```

```
skripsi=guidata(gcbo);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.CitraBiner);
cla;

skripsi=guidata(gcbo);
set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.Dilasi);
cla;


% --- Executes on button press in pushbutton6.
function pushbutton6_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton6 (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
close;
% --- Executes on button press in TapisBentuk.
function TapisBentuk_Callback(hObject, eventdata, handles)
% hObject    handle to TapisBentuk (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
skripsi = guidata(gcbo);
a3 = get(skripsi.citraY,'UserData');
%Enhancement
    %Imadjust
    %-----------------------------------------------------------------
    c3 = imadjust(a3);
    set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.Imadjust);
    set(imshow(c3));
    set(skripsi.Imadjust,'Userdata',c3);
    %-----------------------------------------------------------------
    %Perhitungan bentuk
    %# binerization
    %-----------------------------------------------------------------
    tb1=im2bw(c3);
    set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.CitraBiner);
    set(imshow(tb1));
    set(skripsi.CitraBiner,'Userdata',tb1);
    %-----------------------------------------------------------------
    %Operasi morfologi
    %-----------------------------------------------------------------
    secl=strel('disk',5);
    bwdilat=imdilate(tb1,secl);
    set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.Dilasi);
    set(imshow(bwdilat));
    set(skripsi.Dilasi,'Userdata',bwdilat);
    set(skripsi.ProgramKamboja,'CurrentAxes',skripsi.BENTUK);
    set(imshow(bwdilat));
    set(skripsi.BENTUK,'Userdata',bwdilat);
    %-----------------------------------------------------------------
    % fprintf(' \n\tNilai Warna =%13.4f\n',meanY);
    BENTUK1(bwdilat)
```